

ABSTRACT

A rapid simulation is made to create an illuminated scene of object with a simplified arithmetic of calculating an intended color change effect. The object illuminated with lighting fixtures are divided into discrete elements each having a lamp-by-element table defining lamp color component values of each of the influencing lighting fixtures. In accordance with the changes in the output characteristic and/or the position of the lighting fixture, it is determined which one or ones of the discrete elements are influenced by the changes. Then, the lamp-by-element tables only associated with thus determined elements are picked up in order to modify the color component values as a function of the changing output characteristic and the position of the influencing lighting fixture. The resulting color components at each discrete element are then processed to provide a color distribution over the array of the elements for rendering the view of the illuminated scene.